

Management Accounting
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Lecture 28
Flexible Budget – A Mini Case- II

Welcome students. So, we are in the process of learning about the preparation of the Flexible Budgets. And in the previous class we prepare the budget the two statements with regard to the flexible budget of this company Dreck Shipping Company. And we learned about that how we prepare the flexible budgets? So, the first requirement of this case was that we have to prepare the columnar budget for the three levels of the seven, eight and nine billion worth of the revenues.

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8-41 Flexible and Static Budgets

Drake Shipping Company's general manager reports quarterly to the company president on the firm's operating performance. The company uses a budget based on limited expectations for the forthcoming quarter. The general manager has just received the condensed quarterly performance report shown in Exhibit 8-5. Although the general manager was upset about not exceeding enough revenues, she was happy that her cost performance was favorable, otherwise, her net operating income would be even worse. The president was really unhappy and remarked, "I can see some merit in comparing actual performance with budgeted performance because we can see whether actual revenue exceeded what our best guess for budget purposes. But I can't see how this performance report helps me evaluate cost control performance."

1. Prepare a columnar flexible budget for Drake Shipping at revenue levels of \$7,000,000, \$8,000,000, and \$9,000,000. Use the format of the last three columns of Exhibit 8-3, page 342. Assume that the prices and mix of products and are equal to the budgeted prices and mix.
2. Express the flexible budget for costs in formula form.
3. Prepare a condensed table showing the master (static) budget variance, the sales activity variance, and the flexible-budget variance. Use the format of Exhibit 8-5, page 343.

	Budget	Actual	Variance
Net revenue	\$8,000,000	\$7,600,000	\$400,000 U
Fuel	\$ 180,000	\$ 187,000	\$ 7,000 F
Repairs and maintenance	80,000	78,000	2,000 F
Supplies and miscellaneous	800,000	788,000	12,000 F
Variable payroll	\$ 800,000	\$ 800,000	\$ 0
Total variable costs*	\$8,000,000	\$8,223,000	\$177,000 F
Supervision	\$ 180,000	\$ 183,000	\$ 3,000 U
Repairs	80,000	80,000	0
Depreciation	—	—	—
Other fixed costs	—	—	—
Total fixed costs	—	—	—
Total costs charged against revenue	—	—	—
Operating income	—	—	—

* U = Unfavorable; F = Favorable.
 * For purposes of this analysis, assume that all operating costs are fixed and trace to the budgeted mix for the period. Also assume that the prices and quantities are equal to the budgeted prices and quantities.

So we prepared that statement and then try to find out that what is the what should be the level of performance at these three levels of the revenue that is seven, eight and nine million dollars? And then we have to prepare the summary statement or the variances analysis and then we did, we means calculated the variances. One part of the variance analysis we did.

And there we try to find out the variances means the two types of the variances means the one variance was the sales activity variance and second one was the flexible budget variance. And we found out that there are the variances means sales activity variances are ought to be there because we have brought down the sales activity from the budgeted level of the 800,000 dollars or maybe sorry 8 million dollars to the 7.6 million dollars of the 76 lakh dollars.

So, when the revenue has come down certainly, the activity level has come down that we want to sell for 8 million worth of the dollars. But we could sell only for 7.6 million worth of the dollars in the market. So, certainly the activity level is come down the variances were ought to be there and then the variances occurred in the activity level and the revenue came down we expect that the cost should also be proportionately coming down. So that part of the variances is be calculated and then we prepared the budget that was the flexible budget for the actual level of production that actual level of production and sales, sales for 7.6 million.

We prepared first the flexible budget for that means in proportion to the reduction in the revenue from the 8 million to 7.6 million. We prepared the flexible budget for the cost that is operating cost and the fixed cost. But still there also be found that there are the variances and there what the negative variance is? So, if we look out those variances we found out in that statement the variances were something like.

Your say in the flexible budget variance we found out that the variance of 144,000 dollars and that to the negative variances was found. Means the total your operating income has come down. The operating income at 7.6 million of the dollars at that expected income was 540,000 dollars. When you bring down the revenue level, performance level even comes down because of any reason from the 8 billion to 7.6 million dollars.

Still the operating income should have been 540,000 dollars. But actually the actual income operating income which we had was 396,000 (lakh) dollars. So it has come down from the estimated or expected income of the 540,000 dollar. So there was a variance negative variance of the 144,000 dollars. So, now means we have to analyse the reasons for that variances methods means the third statement which will be preparing.

I gave the title of that statement that the variance analysis and the summary of the performance of the summary of the performance and the variances analysis. So when we prepare the summary of the performance we found out that there are the variances are the sales activity level which was 80 unfavourable. And then the flexible budget variances which was 144 so sales activity variance is not that is a big problem because actually the revenue has come down but the flexible budget variance problem is the problem because your flexible income means the operating income at 7.6 million revenue that expected was budgeted was 540,000 dollars.

But actually it is 396,000 dollars it means there is a negative variances of 144000 dollars. Now we will analyse that why this variance has occurred. Whether it has come up because of the operating income or because of the say sorry it has come up because of the variable expenses or the fix expenses that we need to find out. And if it is come up or these variances have come up total variance in the operating income there is a negative variance by 144000 has come up because of both the cost because variable cost has also gone up.


Fixed cost has also gone up. In that case we will have to be careful. First of all know the reasons that on what accounts what components of the variable cost have contributed to that cost? What component of the fixed cost of contributed that to that increase cost and how to check that increase in the cost of the negative growth in the cost? And it impacting the operating income negatively will have to check for that.



And then we will have to say analyse it and try to find out the reasons for that so that next time these variances do not occur. And your variable income is very much under control. Variable expenses is very much under control and fixed expense should not increase within the given range of level of the revenue or the sales, right. Now we will prepare the statement and the statement is actually the statement called as analyses of the variance statement analyses of the variance.

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Analysis of variances at Actual Rev. Level
at \$ 7.6 M or \$76,00,000 (dollars)

Particulars	Actual Cost	Admissible Allowance	Budgeted Variance
Fuel	157	152	\$ 5 (A)
Room	78	76	2 (A)
S. mem.	788	760	28 (A)
V. Payroll	500	502	2 (A)
Supervision	100	100	—
Rent	400	400	—
Dep.	158	160	2 (F)
D.S.C.			144 (A)
Total	3204	3260	



Flexible Budget

8-43 Flexible and Static Budgets

Drake Shipping Company's general manager reports quarterly to the company president on the firm's operating performance. The company uses a budget based on annual expenditures for the forthcoming quarter. The general manager has just received the condensed quarterly performance report shown in Exhibit 8-13. Although the general manager was upset about not exceeding through revenues, she was happy that her cost performance was favorable, otherwise, "I can see some merit in complaining about performance with budgeted performance because we can see whether actual revenue exceeded our budget goals for budget purposes. But I can't see how the performance report helps me evaluate cost control performance."

1. Prepare a collapser flexible budget for Drake Shipping at revenue levels of \$7,000,000, \$8,000,000, and \$9,000,000. Use the format of the last three columns of Exhibit 8-1, page 342. Assume that the prices and mix of products sold are equal to the budgeted prices and mix.
2. Express the flexible budget for costs in formula form.
3. Prepare a condensed table showing the master (static) budget variance, the sales activity variance, and the flexible budget variance. Use the format of Exhibit 8-1, page 342.

	Budget	Actual	Variance
Net revenue	\$8,000,000	\$7,600,000	\$400,000 U
Fuel	\$ 150,000	\$ 157,000	\$ 7,000 F
Repairs and maintenance	80,000	78,000	2,000 F
Supplies and maintenance	800,000	788,000	12,000 F
Variable payroll	\$ 800,000	\$ 820,000	\$ 20,000 F
Total variable costs*	\$1,830,000	\$1,843,000	\$ 13,000 U
Supermarket	\$ 180,000	\$ 183,000	\$ 3,000 U
Rep.		180,000	
Depreciation			
Other fixed costs			
Total fixed costs			
Total costs charged against revenue			
Operating income			



Analysis of the variances at actual revenue level of dollar 7.6 million or 76 lacs dollars, 76 lacs. So this variance should not be there. So analysis of the variance is at actual revenue level of the 7.6 million 76 lacs. So, if we prepare the statement then we will be able to find out that on what account which variable cost is gone up? And which fixed cost has gone up? And we will check that that this cost does not go up in the next quarter or the purpose of budgeting is achieved.

So, now we will talk about the particulars right these are the particulars. Then we will talk about the actual cost actual cost at the revenue level of the 7.6 million flexible allowance. Flexible allowance means how much was expected to be the cost? And then is the budget variance then is the budget variance then is the budget variance, right? So we have to prepare this statement and try to find out why these variances have occurred here right. Now, we will take care as the first head of the expenses what if you go back to the problem the first head of the variable expenses.

So we will say hear that what was the actual cost of the fuel actual cost of the fuel is I will take the figure that amount in dollar 1 thousands. So how much is the actual cost of the food at the 76 lacs that is 157,000 dollars on the 157000? So, it means actually 157000 worth of the dollars and flexible allowance was how much? What should have been the cost 152000 dollars means we are proportionated reducing it?

That for example if it is given here that, for the 8 million worth of the revenue if the fuel cost is 160,000 dollars then how much should it be for the revenue level of the 7.6 million of the

76 lacs? So expected cost was in proportion to the reduction in revenue was 152,000 dollars. Actually we have paid is 157,000 dollars. So it means the budget variances there and that variance is Y means 5 and this variance is unfavourable, right?

Then we talk about the repair and maintenance R and M. Repair and maintenance if you talk about what is actual cost of the repair and maintenance at the 76 lacs of the revenue? That is 78000. What should have been the cost should have been 76000 dollars? And there is variance of how much 2,000 dollars and this variance is again unfavourable right? Then you talk about the supplies and maintenance the supplies and maintenance is now actual cost is how much 788000 should have been? How much 760000 and then the variance we have found out, Here is how much that is 28 unfavourable, right.

Then you talk about the variable payrolls, payrolls so variable payrolls. If you talk about is the actual cost is how much 50? Let us see but what is the actual cost to the variable payrolls? The actual cost is 52lacks, right? 52lacks and the allowance was how much the allowance was as per the revenue level of this that is 5092, right? If you take this if you calculate this. This is very serious very-very high amount of the variance.

And this variance is how much 108 unfavourable? Actually 52lacks and expected was 5092. So means there is a variance of 108000 is variance is there, which is very serious amount, which many big amount causing the largest part of the variances. Then you talk what the supervision? Supervision is largely the fixed cost if you look at the supervision. Supervision is the part of the fixed cost. Let us see, in the supervision what has happened actual cost we have paid is 184,000 or 1,83,000 thousands? Let us see what was actual cost? Actual cost paid is 183000. And what was the allowance was hundred and Eighty thousands

Because if it is cost so fixed cost is given to us is at the 8 million level of the level of the revenue. It is hundred and Eighty thousand. So at the 7.6 it was expected to be same if not coming down but actually it has gone up by 3,000 dollars. So, expected was 180000. And actually is 183000 thousands should be there is still variance negative variance of how much three and this is unfavourable right?

So supervision is also causing the variance and then talk about the rent. We talk about the rent is same 160 160 160 was expected, 160 is there. So there is no variance. Then we talk about the max expenses is what next? Head of expenses the depreciation and depreciation was expected to be how much for 480. It is 480. So, it is no variance has been seen, and then

in case of the other fixed cost, for OFCs. Other fixed cost, if you talk about the cost is this other fixed cost OFC.

And this OFC is how much is other fixed cost? It is 158 actually. And expected was how much expected? Other fixed cost was 160,000 dollars. Actually, it has come down by 2,000 dollars, because the actually is actual cost is 158. It was expected to be how much 160,000 dollars. So it means there is a positive variance of 2 and this variance is favourable, right? Now we calculate the total cost here total is how much total is actually is how much? 7204 total cost is the 7204? What we have calculated? It is given here 7204 thousands that is the 72 lakh four thousand and say the budgeted was how much budgeted was expected to be 7060 thousand dollars and there is a variance of how much? If you total it up this works out as 57 then 35, 35 and 180 is 143, 146 and minus 2, 144.

So this is the same 144 which we found out in the previous statement. The same we have verified that this statement is or this variance is available with us. And now we have analysed these variances further we have dissected the flexible budget variances. And we have found out the reasons for the increase in the cost and reduction in the operating income by a sum of rupees 144000 thousands.

So in this case if you talk about, we can say that in the variable expenses almost everywhere. There is a negative variance, right? Variable expenses have not proportionately come down in the same manner, in the same proportion, in the same amount. How much was expected to be? When there is a reduction in the level of the revenue from the 8 million dollar to the 7.6 million dollars then the same reduction has not been seen in the same proportion in the variable cost.

We have seen at every level there are the variances fuel have also be used more by 5000 dollars repair and maintenance also we have spent more amounts that is by 2,000 dollars supplies. And say you can call it as this machining or this supplies and miscellaneous expenses. If you talk about we have paid a large amount that is 28 thousand dollars. We have paid extra as compare to the expected expenditure at the revenue level of the 7.6 million dollars.

And variable payroll is a cause of concern variable payroll is a cause of concern because the larger part of the variance is that is of the total 144 thousands 108000 have occurred because of the one reason that is the variable payrolls, right? So now you can see that if analyse the

reason for that then will have to find out why the variable payrolls cost is gone up at that second cause of concern here is the increase in the supervision cost. I told you many times that the fixed cost should remain fixed for the given level of performance and then we prepare that say columnar budget three columnar budget for seven, eight, nine million level of the revenue and productions. Then we found out that say the fixed cost was expected to remain the same.

The fixed cost is say expected to be 180000 thousand in case of the supervision was expected to be same for 7, 8 and 9 million level of the revenue so 7.6 also comes in between in this range. So, we were not expecting that the fixed cost will go up supervision cost will go up. But it has gone up and this is a serious cause of concern we have to find out why the supervision cost has increased right?

So from this analysis you can find out that with regard to the human resource is cost. Whether, they are the factory workers or whether they are the office employees the HR cost has gone up both are concerned to the human resources. Variable payroll is also concerned to the human resources and supervision is also concerned to the human resources.

Difference is one are the contract employees working on plant second are the regular employees, permanent and permanent employees working in the office or in the plant as supervisor. So this gives us an idea that largely the reasons for this variance or these two variances are uncontrollable because human resource cost is largely controlled by the external factor.

And those external factors are labour market when the labour rates go up. And Labour rates are not decided by the companies labour rates are decided by the external factors, labour market, price index, income of the people and the level of the say skill level of the workers. So means when the price index goes up everyone is expected to increase the prices of human resources or the salaries of the workers as well as employees.

So if the price index is going up in the economy that human beings on the human resources are becoming costlier. And human beings are coming becoming costlier nobody can control it because if you do not jack up their salaries then stopped working. And means that is not something in our hands. That you do not means hire the local workers you bring it from other market because largely the human resources are regulated by the governments also or their prices, their salaries are also regulated by the government. To some extent minimum wage

rate is decided by the government, to a larger extent; and the for example if this case belongs to US or US market. Then that market the labour rates are largely means decided highly regulated market is that and they decided by the government.

So when the say labour rates go up or the employee, employee's salaries go up naturally the human resources cost is expected to go up. And in these two heads we are seeing that variable payrolls also belong to HR cost and the supervision cost, also belong to the HR cost in both the cases HR cost has gone up. So largely we have to avoid this variance but we means not avoid but we have to ignore this variance because this is something which has happened because of the factors which are out of control.

We talk about the other part that is the Fuel. Fuel we have to see that the variance is not very high. It is only 5,000. So sometime it may be possible because fuel prices also keep on say fluctuating going up and down. So whether it has happened because of some extra use of the fuel, misuse of the fuel or the prices of the fuel going up which was not expected. So, will have to check for that if the reason was controllable.

We will say make sure that in the next quarter no wastage of the fuels takes place. But if the prices have gone up, it is again the uncontrollable reason. Similarly, you talk about the repair and maintenance. We have paid some higher price for that by 2,000 dollars. We have paid extra. So, this is again the variance but can be ignored because it is not a very high amount. And in case of the repair and maintenance also, some time to some extent human resource cost is involved because people also means work in the R and M area repair and maintenance area at they are largely skilled labour.

So it means because of that reason that the HR cost has gone up, the workers cost, the say technicians cost is gone up and this variance has been seen. Another reason is another variance we have found out which is very significant by 28,000 dollars and that too in the supplies and miscellaneous expenses. So first we have to check here what are the supplies what are the miscellaneous expenses?

Why this is such a huge negative variance has come up that is by 28000? You can if you see this this is a second largest contributor in the total variances of 144000dollars. So we will have to find out reasons for that fix up the reasons for that, so that things do not occur again. So this is a very big variance which cannot be ignored.

And then if you talk about the other fixed cost here we are seeing, that the other fix cost have come down means as against expected level of the 160000 dollars. It is come down to 158,000 dollars. So we have seen a favourable variance here but still it has to be analysed may be we had estimated the higher amount in the budget or actually we have done something which has caused us to go for the saving.

We have to check for this if you look at all these variances in total. Amount is very high that is 144,000 of the variances but means will have to check out the reasons for that and try to find out in the reasons were controllable and were not controlled then we will have to take action against the people or those reasons who have not say performed their part.

But if largely the say the reason were uncontrollable, nobody can control it, because of the external factor, because these reasons have, because of the external factors then I think we have to ignore it and we have to leave it to the time at the market situation that how the market responds? So, we have to increase the either the say for the compensating the company for the increase HR cost or maybe the other cost we will have to check up the selling price alerts how the market response? Or how the market behaves?

So, will have to check that otherwise largely the reasons seem to be uncontrollable and will have to go with this. So if we can recover this by increasing the price of the final product in the market because HR cost is gone up. And it is not because of anyone's fault then we will not normally the consumer the buyers are customers of the companies also accept increase in the price.

So this increase in the cost can be passed on to the people. But the purpose of this exercise was to know about that the actual level of the performance. When it has come down from 8 million dollars to 7.6 million dollars, how the cost has reacted? And whether the cost has also come down in the same proportion. Especially the variable costs we have found it that neither the variable cost nor a fix cost has come down in the same proportion rather it has means more than the expected amount.

And we have seen the variance is of the 144 thousands and which are negative variances, right? So up to this discussion if you look at these cases. The three cases which we discussed two cases with regard to the master budget and one case with regard to the flexible budget. So if you look at these cases it involves two components because we are talking about the subject like Management Accounting.

Management Accounting means generating that kind of information which is very much useful to the management for the managerial decision making. Most of the information out of this can be presented to the top level management. We will some time at the board level people, in the board level meetings to the board of directors and then will have to help them to take the say right decisions in the right earnest or in the interest of everybody and the firm as a whole.

So there are the two things involved in this component. This analysis of the entire budgeting, one component is finding out the information with the help of numbers, calculating the values with the help of numbers, calculating the input and output relationship with the help of numbers, right? In case of the master budget we saw that we prepare the detailed budget for one quarter.

And then we try to find out that what is the budgeted level of performance? And with the help of that budget management fixes of the targets, right? And those budgets are passed on to the different interest groups different units and subunits which are called as a responsibility centres in the firms in the organisations.

And they are communicated with something in advance that. This is the expected level of the performance from you whether it's purchase of material whether it's a sale of the finished product whether it's collection of the sales whether it's a payment for purchases or maybe the cash position in the firm. The profitability position in the firm or the overall financial position of the firm all these budgeted statements are prepared before the beginning of that budget period may be a week, may be a month, may be a quarter may be a six month or may be a year and when actually the time begins before that we have statement in our hand which acts as a guiding force and looking at that information or going by that information. We say go for the actual performance so that we have the benchmark in our hands, if benchmark is there everybody knows and they remain informed that that our performance will be compared against something.

And if that something is not means, our actual performance is not means comparable to that something that budget then (may be the may be) may be held responsible for the low performance. So one thing is calculating the information and second thing is using that information for the management decision making. So these days means calculation the

information is also very crucial as far as the budgeting process is concerned largely. In these days we follow the budgeting process which we call it as bottom to top.

We do not impose the budget on the lower level people. We involve the people lower level people in the budgeting process. We ask them to contribute in the budgeting process. And tell the firm what can they do for the firm; for the best performance of firm, right? So the sales people are asked that looking at the situation in the market the customer's requirements the competitive scenario the competitors distribution policies their pricing. And so many other things there advertising campaigns the sales force in the market who is directly connected to your distribution channels or the customers, they are asked that how much says you expect that you can do or this firm other company can do in the coming quarter of three months, right? Similarly, the purchase department is involved that tell that we need different type of materials. You know that that you tell that what could be the best source of find that material and what should be the minimum per unit cost we should pay for buying that different types of the materials?

So when the purchase department who are directly linked to the purchase process; if they are asked and their input is asked later on they cannot say that while preparing the budgets our input were not asked for. And it is because of that reason that the one of the purchase variances have come up. The variances at the purchase level have come up. Similarly, sales people have told them, told the firm, told the board that we are going to sell this much of the production in the coming quarter looking at the market conditions.

And when the actual performance is less than that so they themselves hold responsible themselves, and means we can think of taking action against those sales staff who are not performing their duties well. So, one thing is the first part of the budgeting is say preparing the crucial information, strategic information in the form of the budgets. Starting with the sales forecasting going up to the budgeted balance sheet and then not preparing the one level of the budget which we call it as static budgets, but flexible budgets for the multiple level of the productions putting the system in place.

So that if any level of the production changes tomorrow. Then we have the budget either we have the budget with us or we can easily prepare at that time. For example, in this case we had prepared the budget for three levels 7 million, 8 million, and 9 million worth of the

revenue but actual revenue be found out what somewhere means neither of was not at the neither of the three levels but somewhere in the between eight and nine.

And that was 7.6 million so we have put the formula in place. So the movement you change the revenue level from the 8 million to 7.6 million all other figures automatically change. So to even do not have the budget prepared well in advance for that 7.6 million level of the revenue. We have put we have created the system put the things in place and we are automatically going to get the results. When the actual performance is ready with us. And then comparison between the two becomes more reasonable, more sensible and more rational. So flexible budgeting means generating this information by way of preparing the budgets is one thing getting the actual performance for the market is the second thing. And then using this information budgeted and the actual information for the management decision making, for the next time. So that if any limitation we have seen here any shortcomings, we have found out hear those limitations those shortcomings do not come up do not reoccur, do not affect the performance in the time to come right?

So this is a whole objective of the budgeting. And we wanted we nearer to the say the maximum close to the budgeted estimates. So you can understand that how the budgeting process helps the management in the managerial decision making? And how it is a (very) very useful technique for say managerial decision making and part of the management accounting, right? So now is (very) very important technique, (very) very useful technique and we have learnt it that the budgeting and budgetary process is the first and the foremost.

First, we discussed was the cost sheet analysing the whole cost and then going for the actual performance. And here it is a budget where we prepare the total estimate right from the cost to the sales, to the cash, to the profit, to the balance sheet and not for the one level but for multiple levels. So we means are going to be helped out and this entire process is going to facilitate the management decision making. So generating information one getting actual information two and then comparing actual with the budget.

And then say taking appropriate decision at the top level of the firm is the ultimate purpose of this budget and budgetary control and facilitating the management decision making. Here I would like to add one thing that if the firm wanted to nearer to the budgeted results then it should be means the budgeting should be like that the time horizon of the budgeting should be as a short as possible, right?

Some firms are there who are into the weekly budgeting system. Those very expensive because getting them frequent data and preparing the weekly budgets is very difficult. But some firms who have got very advanced IT systems. They are even preparing the budgeted say monthly, weekly budgets. At least you can go for the fortnightly budgets for the budget for the 15 days or many firms are largely.

These days firms are into the monthly or the quarterly budgeting so monthly and quarterly budgeting can very easily be means implemented in the firms. So shorter the budget horizon nearer the actual performance will be to the budgeted estimates and the overall the overall performance of the firm will improve. So, regarding budget and budgetary control or the budgetary process I will stop here.

And I think I could say explain it to the largest possible extent then how it is (very) very useful technique in the management decision making. So we will stop here with regard to the budget and budgeting process. And next time I will start in the next class the next technique that is the standard costing till then thank you very much.